



Jason Mars, Yiping Kang, Jayanaka L. Dantanarayana, Chandra Irugalbandara, Kugesan Sivasothynathan, **Christopher Clarke**, Baichuan Li, Lingjia Tang. 2024. MTLLM: LLMs are Meaning-Typed Code Constructs. arXiv preprint 2024 ([PDF](#), [Code](#))

**Christopher Clarke**, Yuzhao Heng, Lingjia Tang, Jason Mars. 2024. PEFT-U: Parameter-Efficient Fine-Tuning for User Personalization. arXiv preprint 2024 ([PDF](#), [Code](#))

**Christopher Clarke**, Roland Daynauth, Jason Mars, Charlene Wilkinson, and Hubert Devonish. 2024. GuyLingo: The Republic of Guyana Creole Corpora. In Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (Volume 2: Short Papers), pages 792–798, Mexico City, Mexico. Association for Computational Linguistics. ([PDF](#), [Code](#))

**Christopher Clarke**, Karthik Krishnamurthy, Walter Talamonti, Yiping Kang, Lingjia Tang, Jason Mars. 2024. One Agent Too Many: User Perspectives on Approaches to Multi-agent Conversational AI. arXiv preprint 2024 ([PDF](#), [Code](#))

**Christopher Clarke**, Matthew Hall, Gaurav Mittal, Ye Yu, Sandra Sajeev, Jason Mars and Mei Chen. 2023. Rule By Example: Harnessing Logical Rules for Explainable Hate Speech Detection. 61st Annual Meeting of the Association for Computational Linguistics: ACL 2023 ([PDF](#), [Code](#))

**Christopher Clarke**, Yuzhao Heng, Yiping Kang, Krisztian Flautner, Lingjia Tang and Jason Mars. 2023. Label Agnostic Pre-training for Zero-shot Text Classification. Findings of the Association for Computational Linguistics: ACL 2023 ([PDF](#), [Code](#))

**Christopher Clarke**, Joseph Peper, Karthik Krishnamurthy, Walter Talamonti, Kevin Leach, Yiping Kang, Walter Lasecki, Lingjia Tang, Jason Mars. 2022. One Agent To Rule Them All: Towards Multi-agent Conversational AI. Findings of the Association for Computational Linguistics: ACL 2022 ([PDF](#), [Code](#))

Yiping Kang, Ashish Mahendra, **Christopher Clarke**, Lingjia Tang, Jason Mars. 2022. Towards Personalized Intelligence at Scale. arXiv preprint 2022 ([PDF](#))

Stefan Larson, Anish Mahendran, Joseph J Peper, **Christopher Clarke**, Andrew Lee, Parker Hill, Jonathan K Kummerfeld, Kevin Leach, Michael A Laurenzano, Lingjia Tang, Jason Mars. 2019. An Evaluation Dataset for Intent Classification and Out-of-Scope Prediction. Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP), 1311–1316. ([PDF](#), [Code](#))

## UNDER REVIEW

Roland Daynauth, **Christopher Clarke**, Krisztian Flautner, Lingjia Tang, Jason Mars. 2024. SLMEval: Leveraging Maximum Entropy Principles for Fair and Accurate Evaluation of Large Language Models. Under review

Roland Daynauth, **Christopher Clarke**, Krisztian Flautner, Lingjia Tang, Jason Mars. 2024. Elo Unraveled: Rethinking LLM Rankings in Head-to-Head AI Combat. Under review

Jason Mars, Yiping Kang, Jayanaka L. Dantanarayana, Chandra Irugalbandara, Kugesan Sivasothynathan, **Christopher Clarke**, Baichuan Li, Lingjia Tang. 2024. Meaning-Typed Programming: Language-level Abstractions and Runtime for GenAI Applications. 2024. Under review

## PATENTS

Andrew Lee, Stefan Larson, **Christopher Clarke**, Kevin Leach, Jonathan K Kummerfeld, Parker Hill, Johann Hauswald, Michael A Laurenzano, Lingjia Tang, Jason Mars. 2020. Systems and methods for constructing an artificially diverse corpus of training data samples for training a contextually-biased model for a machine learning-based dialogue system. US Patent 10,796,104, 2020

## Awards, Fellowships, & Grants

---

2022 **Weinberg Institute for Cognitive Science Travel Award**, University of Michigan

2022 **William R. & Flora Hewlett Foundation Award**, University of Michigan

2017 **Seeds for the Future Programme Award Recipient**, Huawei

2015 **Promoting CSME through Field Promotion Award Recipient**, Caricom

## Presentations

---

\* *presenting author*; + *mentored undergraduate*

## INVITED TALKS

Fall 2024. *Gen AI Research: Challenges and New Frontiers*. Department of Computing, Information and Mathematical Sciences, and Technology (CIMST), Chicago State University

Winter 2024. *Towards Enhanced Human-AI Interaction: A Holistic Approach to Personalization in Natural Language Processing*. Department of Computing, Information and Mathematical Sciences, and Technology (CIMST), Chicago State University

Fall 2023. *Building Bridges in CSE PhD Studies*. NSBE student group, Wayne State University

Winter 2023. *Conversational AI Research: Challenges and New Frontiers*. EECS 449 Conversational AI, University of Michigan

Summer 2020. *DevOps Automation with Gitlab*. V75 Dev Talk, Remote ([Video](#), [Slides](#)).

Spring 2018. *A Sentient Approach to Designing Smart Devices*. 2nd Annual Undergraduate Research Conference, Turkeyen, Guyana

## CONTRIBUTED PRESENTATIONS

Timothy Indarsingh\*\*, Girendra Persaud, **Christopher Clarke**. 2018. A Comparative Analysis of the Usability of Event Management Software Interfaces. Poster: 2nd Annual Undergraduate Research Conference, Turkeyen, Guyana

## Teaching Experience

---

Fall 2024	<b>EECS 449: Conversational AI</b> , Graduate Student Instructor	University of Michigan
Winter 2023	<b>EECS 449: Conversational AI</b> , Graduate Student Instructor	University of Michigan
Fall 2021	<b>EECS 498: Conversational AI</b> , Graduate Student Instructor	University of Michigan
Summer 2018	<b>CSE 1201: Introduction to Programming</b> , Lecturer	University of Guyana
Spring 2018	<b>CSE 3203: Object Oriented Software Analysis, Design and Development</b> , Lecturer	University of Guyana
Spring 2018	<b>CSE 2200: Contemporary Programming Paradigms</b> , Co-Instructor	University of Guyana
Fall 2017	<b>ITE 4102: Applied Project</b> , Co-Instructor	University of Guyana
Fall 2017	<b>CSE 3101: Internet Computing II</b> , Lecturer	University of Guyana
Fall 2017	<b>CSE 2201: Internet Computing I</b> , Lecturer	University of Guyana
Fall 2017	<b>CSE 2100: Data Structure &amp; Algorithms</b> , Lecturer	University of Guyana
2016-2017	<b>V75 Web Developer Series</b> , Course Co-ordinator & Instructor	WeOwn Space

## Mentoring

---

2024-Present **Braden Loughnane**, University of Michigan Alumni

2022-2023 **Yuhzao (Stefan) Heng**, Undergrad, University of Michigan (Now @GeorgiaTech)

2021-2022 **Victoria Shipman**, Explore CS Research Programme, University of Michigan

2021-2022 **Tamariah Davis**, Explore CS Research Programme, University of Michigan

2017-2018 **Timothy Indarsingh**, Undergrad Advisee, University of Guyana

## Outreach & Professional Development

---

### SERVICE AND OUTREACH

2021-Present	<b>Explore Computer Science Research</b> , Mentor	University of Michigan
2017-Present	<b>Nexus Hub Inc. Annual Hack-Solve</b> , Co-ordinator	Georgetown, Guyana
2014-2017	<b>University of Guyana Career Day</b> , Volunteer, Co-ordinator	Georgetown, Guyana
2017	<b>DevX Event</b> , Co-ordinator	Georgetown, Guyana

## DEVELOPMENT

**MIT 15.390.1x: Entrepreneurship 101: Who is your customer?**, 2015.

**The Entrepreneurs & Innovators Group of Guyana: Entrepreneurship & Innovators Workshop**, 2015

**Caricom CSME in the classroom: Improving Teaching & Learning**, 2015

**HarvardX: GSE2x Leaders of Learning**, 2014.

## PEER REVIEW

International Symposium on Code Generation and Optimization (CGO), Artifact Evaluation Committee	2020
IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS), Reviewer	2020
Empirical Methods in Natural Language Processing (EMNLP), Reviewer	2021 - 2024
Association of Computational Linguistics (ACL) Rolling Review, Reviewer	2022 - 2024
Neural Information Processing Systems (NeurIPS), Reviewer	2022 - 2024